



MASSACHUSETTS TEACHERS' RETIREMENT SYSTEM

# 2008 MTRS Annual Report

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## Message from the Chairman and Executive Director

To MTRS active and retired members:

We are pleased to present this report, which summarizes the Massachusetts Teachers' Retirement System's financial and operating data for the year ending December 31, 2008. Needless to say, 2008 proved to be one of the most volatile, turbulent and fearful years the financial markets have ever seen. Some of the largest U.S. and global financial institutions failed or were taken over by the government. The United States Government working collaboratively with other national governments took unprecedented measures to avoid a global depression. While the MTRS did incur a significant reduction in assets in calendar year 2008, the worst investment performance in our history, it is important to note that one of the advantages and strengths of a defined benefit plan is that we are long-term investors and therefore can withstand short-term volatility in the financial markets. Although it is too early to assess the long-term returns that include the 2008 experience, the losses must be viewed in the context of the substantial gains that the MTRS made in prior years. The investment rate of return of our system has averaged 9.23 percent since the funds were professionally managed by the Pension Reserves Investment Management (PRIM) Board.

As we stated last year, the financial statements in this report are not audited. Rather, they are summaries of the MTRS's official financial reports presented in a way that we believe are easier for our members and stakeholders to read and to understand. In that regard, we would welcome your comments on how we can improve the content and presentation for future reports. Our financial activities are audited within the Commonwealth's annual statewide single audit and our financial reports are reported in the Commonwealth's Comprehensive Annual Financial Report (CAFR). We are also periodically audited by the Public Employee Retirement Administration (PERAC), the oversight agency for the state's 106 public pension systems, and by the Office of the State Auditor. (See the CAFR at [www.osc.state.ma.us](http://www.osc.state.ma.us) in the Publications and Reports section.)

During the past year, Massachusetts public pension systems have been intensely scrutinized by the media, employer and employee groups and other stakeholders with a focus on eliminating loopholes in the pension plan that permitted some employees and employers to game the system. In response to this intense scrutiny, on June 16, 2009, Governor Deval Patrick signed into law "An Act Providing Responsible Reforms

### Executive Staff

**Joan Schloss**  
Executive Director

**Erika M. Glaster**  
Deputy Executive  
Director

**Sean P. Neilon**  
Assistant Executive  
Director

**James H. Salvie**  
General Counsel

**Susan Morgan**  
Director of Strategic  
Planning and  
Special Projects

in the Pension System,” which made significant progress in increasing transparency, predictability and uniformity in the calculation and determination of retirement benefits and put an end to the egregious abuses of the system. The members of the Massachusetts Teachers’ Retirement Board and staff take their responsibilities very seriously. We believe the changes enacted through the first phase of pension reform increase our ability to ensure that benefit payments and determinations are responsible and appropriate, and to ensure the financial integrity of the system for all of our members.

In addition to the pension reform initiatives signed by the Governor, a 15-member Special Commission to Study the Massachusetts Contributory Retirement System is discussing the current benefit structure and funding provisions of the plan. The commission is expected to report on these issues in the fall. The findings of the special commission will lay the groundwork for the next phase of pension reform.

One of the issues that the commission will be reviewing is the adequacy of the current cost of living adjustment (COLA) for our retired members. As stated last year, the Board strongly believes that protecting the purchasing power of our retired members must be a priority when addressing other pension reform issues.

From an operational perspective, the development of our new “MyTRS” computer system continued throughout 2008 with a successful rollout of our imaging and backfile conversion phase. In the very near future we will have all our member records converted to electronic images. We will continue to give you updates as we get closer to the final implementation.

As you know our mission is to ensure that members of the Massachusetts Teachers’ Retirement System achieve and maintain a successful and secure retirement through responsible benefits administration, financial integrity and the provision of outstanding services. We welcome any suggestion and comment you may have to let us know how we are doing.

JEFF WULFSON  
*Chairman*

JOAN SCHLOSS  
*Executive Director*

## Members of the Board



**Jeff Wulfson**  
Chairman

Associate Commissioner  
of Department of  
Elementary and  
Secondary Education



**Linda M. Ruberto**  
Vice Chair

Appointed by  
the Board

Retired  
Massachusetts  
educator



**Timothy P. Cahill**  
State Treasurer

Chairman,  
Pension Reserves  
Investment  
Management (PRIM)  
Board



**Karen Ann Mitchell**  
Elected by  
the membership

Active  
Massachusetts  
educator



**A. Joseph DeNucci**  
State Auditor



**Ellen T. Hargraves**  
Appointed by  
the Governor

Retired  
Massachusetts  
educator



**John A.M. Dow, Jr.**  
Elected by  
the membership

MTRS appointed  
representative  
to the PRIM Board

Retired  
Massachusetts  
educator

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The MTRS's elected representative to  
the Pension Reserves Investment  
Management (PRIM) Board



**Robert Brousseau**  
Elected by  
the membership



## MTRS financial overview

The financial condition of the MTRS can be summarized with two basic financial statements, the **Statement of Plan Net Assets** and the **Statement of Changes in Plan Net Assets**.

- The system's investment rate of return for 2008 was -29.45%.
- The **Statement of Plan Net Assets** (page 7) measures MTRS's assets and liabilities at the close of the calendar year. Net assets (total assets less liabilities) decreased \$8 billion (-31.63%) during the calendar year. This decrease primarily resulted from the depreciation of investment holdings by 29.45%. See page 7 for a condensed statement for the most recent and previous calendar years.
- The **Statement of Changes in Plan Net Assets** (page 8) shows revenues (additions) and applications (deductions) for the fiscal year.

### Financial highlights

- Total plan net assets decreased in value to \$17.31 billion, which contains the offset by contributions by employers, members and the Commonwealth.
- Total losses to plan net assets were \$5.90 billion. The net investment loss of \$7.3 billion was offset by contributions from members (\$596 million) and the Commonwealth (\$812 million).
- Total MTRS benefit payments were \$1.789 billion in service retirement, disability and survivor benefits.
- We expect a new actuarial valuation as of January 1, 2009 to be published in the fall. As of January 1, 2008, the funded ratio was 73.9% (see page 14). The 2009 valuation will show a reduction in the funding ratio.
- A fully funded system is one in which the plan's assets and expected future investment earnings is sufficient to pay all the expected future benefits that members have earned to date.
- The Commonwealth guarantees the teacher retirement benefits. Pursuant to a funding schedule, the Commonwealth pays an amount to fund pension benefits each year, and the annual Commonwealth payment includes a portion to fund current-year benefits as well as a portion to fund prior unfunded actuarial liabilities (see page 15).

## Condensed Comparative Statement of Plan Net Assets

As of December 31, 2008

	2008		2007	
A S S E T S				
Cash and cash equivalents	\$	77,446,807	\$	93,722,571
Receivables		55,911,350		44,949,570
Investments, at fair value		17,177,957,406		25,280,320,141
<b>Total assets</b>	<b>\$</b>	<b>17,311,315,563</b>	<b>\$</b>	<b>25,418,992,282</b>
<b>Payables</b>	<b>\$</b>	<b>178,919</b>	<b>\$</b>	<b>100,278,390</b>
Net assets held in trust for benefits	\$	17,311,136,644	\$	25,318,713,892

## Statement of Changes in Plan Net Assets

For the year ended December 31, 2008

The following charts illustrate the MTRS's revenue sources and their applications. Normally, a majority of the MTRS's income is derived from investments, with the balance coming from member and employer contributions. However, in 2008, we sustained a \$7.325 billion loss due to a global meltdown in the financial markets.

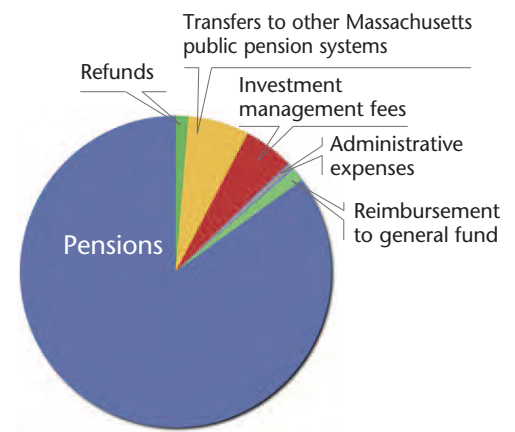
### Revenue sources

Member contributions	\$ 596,007,195	10.1 %
Commonwealth contribution	811,929,694	13.8
Investment loss	(7,325,108,780)	(124.1)
Transfers from other Massachusetts public pension systems	8,648,710	0.1
Federal Grants reimbursement	4,428,360	0.1
Interest not refunded	631,914	0.0
<b>Total revenue</b>	<b>\$ (5,903,462,907)</b>	<b>100.0 %</b>

### Revenue applications

Pensions	\$ 1,789,051,330	85.0 %
Refunds	27,499,831	1.3
Transfers to other Massachusetts public pension systems	132,945,260	6.3
Investment management fees	106,786,186	5.1
PERAC expense	3,348,390	0.2
Administrative expenses	11,057,324	0.5
Federal Grants distributed	4,428,360	0.2
Reimbursements to general fund	28,997,660	1.4
<b>Total applications</b>	<b>\$ 2,104,114,341</b>	<b>100.0 %</b>
<b>Total revenue (above)</b>		
<b>less total applications</b>	<b>\$ 8,007,577,248</b>	

### Revenue applications



### Change in Plan Net Assets

Net assets held in trust January 1, 2008	\$ 25,318,713,892
Total Revenue less total applications	\$ (8,007,577,248)
<b>Net assets held in trust December 31, 2008</b>	<b>\$ 17,311,136,644</b>



## Investment review

All of the plan's investment assets are invested by the Pension Reserves Investment (PRIM) Board through the Commonwealth's Pension Reserves Investment Trust (PRIT). The PRIM Board also manages investments for the State Retirement System and a number of local retirement systems.

Calendar year 2008 investment performance with an overall loss of 29.45% was the worst in the system's history, and well below the actuarial projected return of 8.25%.

When reviewing performance, it is important to remember that the MTRS is a long-term investor and results over longer periods are more significant. The investment rate of return of the system has averaged 9.23 percent since the funds were professionally managed by the Pension Reserves Investment Management (PRIM) Board.

## Investment performance

The breakdown of assets by category and their respective returns for certain periods is shown below.

### PRIT performance by asset class

	Asset allocation % Actual as of 12/31/2008	1yr	Performance 3yr	5yr	% return 10yr	Since inception
Domestic equity	25.5	(42.35)	(11.59)	(3.69)	(0.65)	8.94
International equity	17.6	(42.27)	(6.80)	2.12	3.78	7.38
Emerging markets	3.7	(55.47)	(8.64)	5.88	8.80	9.05
Fixed income	10.1	0.20	4.02	3.90	5.56	8.16
TIPS and ILBs commodities	2.5	(29.90)	(7.07)	(2.48)		1.72
High-yield debt	7.1	(19.17)	(0.51)	3.52		6.40
Alternative investments	11.4	(4.99)	19.25	23.67	14.50	14.77
Real estate	12.1	(15.76)	4.66	12.63	11.69	5.60
Timber/Natural resources	4.3	(17.20)	6.46	11.65		11.76
Absolute return	5.6	(18.95)	(0.22)			2.49
<b>Total</b>	<b>100.00</b>	<b>(29.45)</b>	<b>(2.68)</b>	<b>3.52</b>	<b>4.66</b>	<b>9.23</b>
S&P 500		(37.19)	(8.52)	(2.36)	(1.52)	

## Membership information

This section includes information about the number of members who contribute to the MTRS and individuals who receive pensions.

### Active members

As of January 1, 2008

Source: PERAC's Commonwealth Actuarial Valuation Report, January 2008

■ Number of active members.....	89,636
■ Average age .....	44.2 years
■ Average service .....	12.9 years
■ Average salary .....	\$57,605
■ Average annuity savings fund balance .....	\$48,941
■ Total member compensation.....	\$5,163,498,060

### Note:

**The January 1, 2009 actuarial valuation of the system will be published in the fall of 2009.**

**Active members: Service distribution by age**

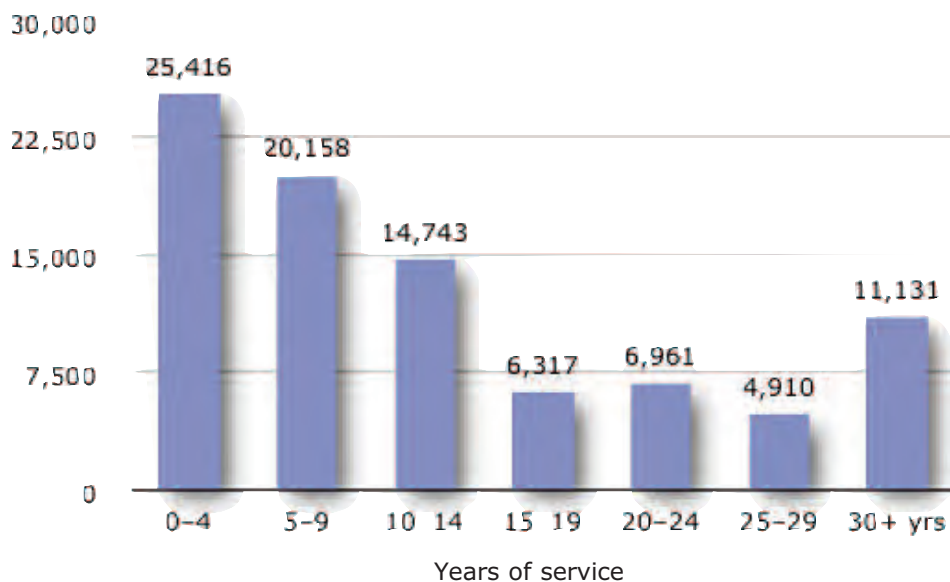
As of January 1, 2008

Source: PERAC's Commonwealth Actuarial Valuation Report, January 2008

Present age	Years of service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
0-24	2,551	1						2,552
25-29	8,818	2,027	3					10,848
30-34	4,121	5,389	1,398	2				10,910
35-39	2,545	3,632	4,519	542				11,238
40-44	2,273	2,271	2,536	1,650	668	2		9,400
45-49	2,115	2,457	1,986	1,119	2,266	401		10,344
50-54	1,497	2,340	2,130	1,218	1,696	2,782	1,830	13,493
55-59	1,192	1,453	1,575	1,257	1,563	1,326	6,798	15,164
60-64	265	510	519	459	651	330	2,148	4,882
65+	39	78	77	70	117	69	355	805
<b>Total</b>	<b>25,416</b>	<b>20,158</b>	<b>14,743</b>	<b>6,317</b>	<b>6,961</b>	<b>4,910</b>	<b>11,131</b>	<b>89,636</b>

**Active members: Distribution by years of service**

Per above



The number of members eligible to retire (those with 20 or more years of service, or age 55 and over with 10 years of service) is 26,959, or **30%** of the total population of 89,636 active members.

**Retired members**

2003 vs. 2007

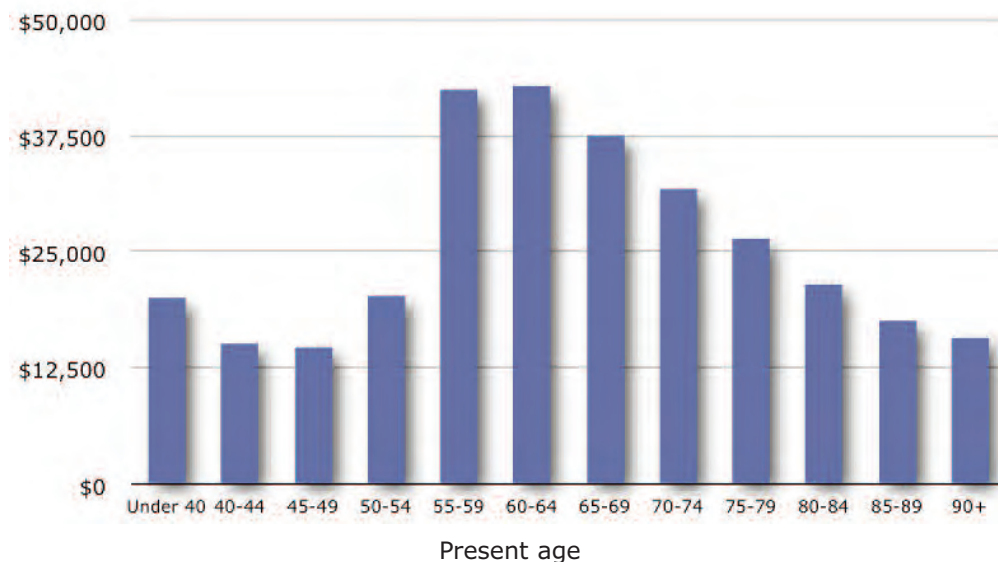
	2003	2007	Change
Number of retirees	39,755	50,024	+ 26%
Average retirement benefit	\$22,535	\$34,347	+ 52%
Total benefits paid	\$895,899,111	\$1,718,157,754	+ 92%

**Benefit by age distribution**

As of January 1, 2008

Source: PERAC's Commonwealth Actuarial Valuation Report, January 2008

Present age	Number of members	Total benefits	Average benefit
Less than 40	101	\$ 2,036,689	\$ 20,165
40-44	40	607,003	15,175
45-49	70	1,034,102	14,773
50-54	296	6,053,186	20,450
55-59	5,995	255,331,690	42,591
60-64	12,863	554,089,993	43,076
65-69	9,600	361,389,529	37,645
70-74	7,027	223,492,442	31,805
75-79	6,024	159,943,866	26,551
80-84	4,078	87,743,106	21,516
85-89	2,377	41,953,730	17,650
90+	1,553	24,482,418	15,765
Total	50,024	\$ 1,718,157,754	\$ 34,347

**Average benefit by present age**

While the average benefit by age will vary from year to year based on the ages of new retirees, it has steadily increased over the years, as evidenced by a right-to-left reading of the bar graph.

## Profile of benefit recipients and payments, by benefit type

As of January 1, 2008

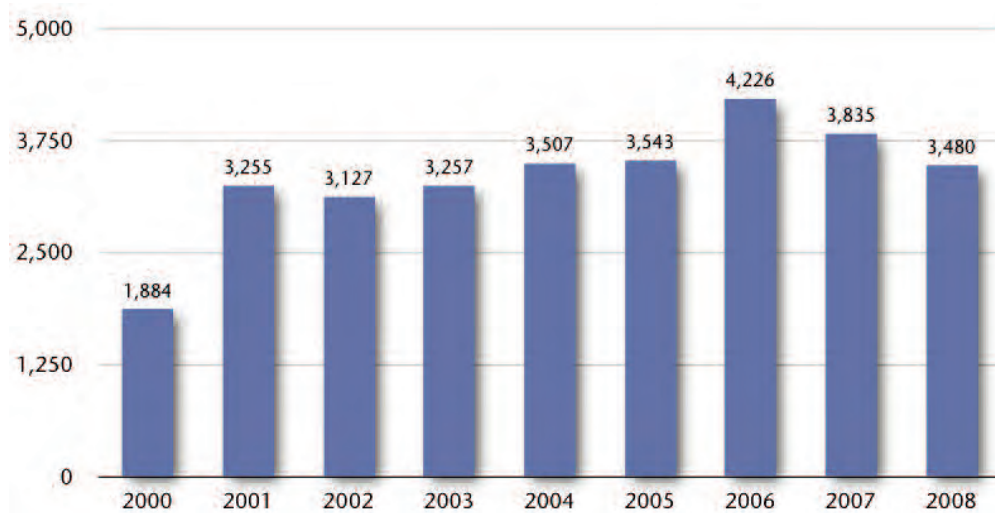
Source: PERAC's Commonwealth Actuarial Valuation Report, January 2008

	Superannuation	Ordinary disability	Accidental disability	Survivors	Total
Number of members	45,888	427	298	3,411	50,024
Average age	70	67.1	67.7	71.6	69.7
Average annual benefit	\$35,889	\$18,256	\$32,813	\$15,741	\$34,347
Annual pension payments	\$1,646,892,372	\$7,795,322	\$9,778,225	\$53,691,835	\$1,718,157,754

The overwhelming majority of our benefit recipients—92%—receive a superannuation retirement benefit, which averages \$35,889 per year.

## Member retirements

By "retirement season" year (October 1–September 30)



While the total number of retirements per year has increased greatly over the past nine years, the numbers have held steady in recent years—a trend we expect to continue.

## Actuarial valuation

As of January 1, 2008; in thousands

The funded ratio, used for funding purposes, is a snapshot of the MTRS's financial health, calculated by comparing the MTRS's future obligations accrued to date to its current assets.

### Actuarial liability

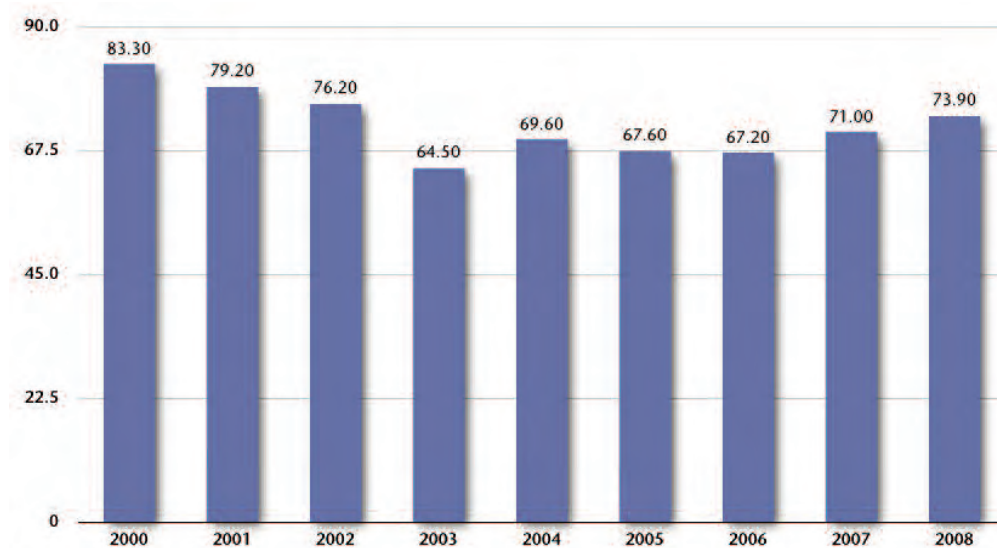
Actives	\$ 14,312,286
Vested terminated	500,000
Retirees and inactive	16,143,218
<b>Total</b>	<b>30,955,504</b>

### Assets

Assets (actuarial value)	\$ 22,883,553
Unfunded actuarial liability	8,071,951
<b>Funded ratio</b>	<b>73.9%</b>

## MTRS funded ratio

By year



The 2009 valuation to be published in the fall will show a reduction in the funding ratio.

Since 2000, the MTRS's funded ratio has ranged from a low of 64.5% to a high of 83.3%.

Full funding at 100% is targeted for year 2025.



## How your MTRS benefits are funded

As of January 1, 2008

Normal Cost is that portion of the Actuarial Present Value of pension plan benefits which is due to be paid in a single fiscal year. Employee contributions represent 83% of the cost, the balance being paid by the employer. Normal Cost is 11.61% of payroll, of which 9.65% is contributed by the employees and 1.96% is paid by the MTRS.

In addition to the employer Normal Cost, the Commonwealth is responsible for the costs associated with the amortization of the System's unfunded pension liability. For FY2008, the Commonwealth appropriated \$809,000,000 for both the employer Normal Cost and unfunded pension liability. This represents 15.6% of payroll.

The Commonwealth is responsible for providing and guaranteeing teacher retirement benefits. Local school district employers do not contribute or bear any responsibility for their teachers' retirement benefits.

"Normal Cost" is an amount calculated by the Commonwealth's actuary of what the Commonwealth has to pay for pension benefits in a given year.

### Normal Cost

Total Normal Cost	\$ 599,689,000
Expected employee contributions	498,433,000
Employer Normal Cost	\$ 101,256,000

### Total Normal Cost as a percentage of payroll

Employee expected contribution ÷ Payroll \$498,433,000 ÷ \$5,163,498,060	9.65%
Employer Normal Cost ÷ Payroll \$101,256,000 ÷ \$5,163,498,060	1.96%
Total Normal Cost ÷ Payroll \$599,689,000 ÷ \$5,163,498,060	11.61%

### Percentage of Normal Cost borne by the employee vs. the employer (MTRS)

Employee contribution ÷ Total Normal Cost \$498,433,000 ÷ \$599,689,000	83.12%
Employer contribution ÷ Total Normal Cost \$101,256,000 ÷ \$599,689,000	16.88%
Total	100.00%

## MTRS pension funding schedule

By fiscal year, in thousands

	FY2007	FY2008 <sup>2</sup>	FY2009 <sup>3</sup>	FY2010 <sup>4</sup>
Appropriation	\$ 860,113	\$ 907,140	\$ 891,941	\$ 817,268
PRIT draws	524,036	617,810	770,810	866,746
Pension payments <sup>1</sup>	\$ 1,384,149	\$ 1,524,950	\$ 1,662,751	\$ 1,684,014

<sup>1</sup> Excludes the annuity portion of the benefit payments

<sup>2</sup> FY2008 payments were reduced by \$1.038 million due to expenditure refunds posted after report issued

<sup>3</sup> FY2009 subject to minor changes as Commonwealth's fiscal year is not closed and audited

<sup>4</sup> Estimated

## MTRS pension funding by source

